

# SOUND ANALYTICAL SERVICES, INC.

ANALYTICAL & ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206)922-2310 - FAX (206)922-5047

## QUALITY CONTROL REPORT

### General Chemistry

Client: Friedman & Bruya  
Lab No: 49123qc  
Units: mg/L

Date Analyzed: 6-6-95

#### METHOD BLANK

Parameter	Result	PQL
Total Cyanide	ND	20

ND = Not Detected

PQL = Practical Quantitation Limit

#### DUPLICATE

Parameter	Lab Sample Number	Sample Result	Duplicate Result	RPD
Total Cyanide	49062-1	ND	ND	NC

RPD = Relative Percent Difference

ND = Not Detected

NC = Not Calculated

#### MATRIX SPIKE

Parameter	Lab Sample Number	Sample Result	Spike Result	Spike Added	%R
Total Cyanide	49062-1	ND	0.269	0.250	108

%R = Percent Recovery

ND = Not Detected

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Report To: Friedman & Bruya

Date: June 7, 1995

Report On: Analysis of Water

Lab No.: 49123

## IDENTIFICATION:

Samples received on 06-01-95

Project: Alaskan Copper

P. O. No. 2-506

## ANALYSIS:

Cyanide Per EPA Method 335.3

Date Analyzed: 6-6-95

Units: mg/L

<u>Lab Sample No.</u>	<u>Client ID</u>	<u>Result</u>	<u>PQL</u>
49123-1	M41986A 59492	ND	0.05
49123-2	M41986B 59493	ND	0.05

ND - Not Detected

PQL - Practical Quantitation Limit

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3012 16th Avenue West  
Seattle, WA 98119-2029  
FAX: (206) 283-5044

**DUPLICATE COPY**

**June 19, 1995**

**INVOICE # 95ACU0619-1**

**Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134**

**RE: Project #7238, Metro 24 Hr. (ACW), PO M41986: Results of testing requested  
by Gerald Thompson, Project Leader for material submitted on May 31, 1995.**

**1 soil sample analyzed for Total Cyanide  
@ \$126 per sample**

**\$ 126.00**

**Amount Due .....**

**\$ 126.00**

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

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FAX: (206) 283-5044

**June 19, 1995**

**Gerald Thompson, Project Leader  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134**

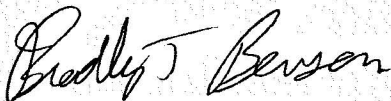
**Dear Mr. Thompson:**

**Enclosed are the results from the additional testing of material submitted on May 31, 1995 from your project #7238, Metro 24 Hr. (ACW), PO M41986.**

**We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.**

**Sincerely,**

**FRIEDMAN & BRUYA, INC.**



**Bradley T. Benson  
Chemist**

**jdp  
Enclosures**

**FRIEDMAN & BRUYA, INC.****ENVIRONMENTAL CHEMISTS**

Date of Report: June 5, 1995  
Date Received: May 31, 1995  
Project: #7238, Metro 24 Hr. (ACW), PO M41986  
Date Samples Extracted: May 31, 1995  
Date Extracts Analyzed: June 1, 1995

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES  
FOR CHROMIUM, COPPER, NICKEL, ZINC, CADMIUM AND LEAD**  
**Samples Processed Using Method 3005**  
Results Reported as mg/L (ppm)

<u>Sample ID</u>	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>	<u>Cadmium</u>	<u>Lead</u>
M41986 A Flow	1.2	0.35	0.71	<0.05	<0.05	<0.05
M41986 B No Flow	1.2	0.49	0.85	<0.05	<0.05	<0.05
<b><u>Quality Assurance</u></b>						
Blank	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
M41986 B No Flow (Duplicate)	1.3	0.50	0.89	<0.05	<0.05	<0.05
M41986 B No Flow (Matrix Spike) % Recovery	102%	97%	99%	100%	101%	99%
M41986 B No Flow (Matrix Spike Duplicate) % Recovery	101%	95%	98%	100%	102%	98%
Spike Blank % Recovery	106%	101%	104%	102%	104%	105%
Spike Level	5	5	10	5	5	10



BTB ~~API~~ HNT  
05.31.95  
1:50

$\mathbb{R}^n$  and  $\mathbb{R}^m$  are the real coordinate spaces of dimension  $n$  and  $m$ , respectively.  $\mathbb{R}^{n \times m}$  is the space of  $n \times m$  real matrices.  $\mathbb{R}^n$  and  $\mathbb{R}^m$  are the real coordinate spaces of dimension  $n$  and  $m$ , respectively.  $\mathbb{R}^{n \times m}$  is the space of  $n \times m$  real matrices.

Contact Jerry Thompson

Phone # (206) 582-8379

Date 5/31/95

PURCHASE ORDER #

M 4/1986

PROJECT LOCATION

3200

### SAMPLE DISPOSAL INFORMATION

☐ Dispose after 30 days  
☒ Return Samples  
☐ Call for Instructions

SIGNATURE	PRINT NAME	COMPANY	Date	Time
Relinquished by: <i>Sandra King</i>	SANDRA KING	ALASKAN COPPER	5/31	1:25 PM
Received by: <i>Cathy Riggs</i>	CATHY RIGGS	FBI	5/31/95	1:25 pm
Relinquished by:				
Received by:				

09/19/94

AKC-0012904

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3012 16th Avenue West  
Seattle, WA 98119-2029  
FAX: (206) 283-5044

**DUPLICATE COPY**

**June 5, 1995**

**INVOICE # 95ACU0605-1**

Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

**RE:** Project #7238, Metro 24 Hr. (ACW), PO M41986: Results of testing requested  
by Gerald Thompson, Project Leader for material submitted on May 31, 1995.

2 water samples analyzed for Chromium, Copper, Nickel,  
Zinc, Cadmium and Lead @ \$65 per sample

**\$ 170.00**

**Amount Due .....**

**\$ 170.00**

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-8282

3012 16th Avenue West  
Seattle, WA 98119-2029  
FAX: (206) 283-5044

**June 5, 1995**

**Gerald Thompson, Project Leader  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134**

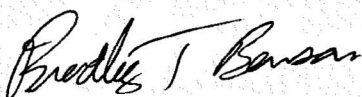
**Dear Mr. Thompson:**

**Enclosed are the results from the testing of material submitted on May 31, 1995  
from your project #7238, Metro 24 Hr. (ACW), PO M41986.**

**We appreciate this opportunity to be of service to you and hope you will call if you  
should have any questions.**

**Sincerely,**

**FRIEDMAN & BRUYA, INC.**



**Bradley T. Benson  
Chemist**

**jdp  
Enclosures**

ACU0605R

AKC-0012906



# SOUND ANALYTICAL SERVICES, INC.

ANALYTICAL &amp; ENVIRONMENTAL CHEMISTS

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 - TELEPHONE (206) 922-2310 - FAX (206) 922-5047

Report To: Friedman &amp; Bruya

Date: June 7, 1995

Report On: Analysis of Water

Lab No.: 49123

**IDENTIFICATION:**

Samples received on 06-01-95

Project: Alaskan Copper

P. O. No. 2-506

**ANALYSIS:**

Cyanide Per EPA Method 335.3

Date Analyzed: 6-6-95

Units: mg/L

<u>Lab Sample No.</u>	<u>Client ID</u>	<u>Result</u>	<u>PQL</u>
49123-1	M41986A 59492	ND	0.05
49123-2	M41986B 59493	ND	0.05

ND - Not Detected

PQL - Practical Quantitation Limit

**FRIEDMAN & BRUYA, INC.**  
**ENVIRONMENTAL CHEMISTS**Andrew John Friedman  
James E. Bruya, Ph.D.  
(206) 285-82823012 16th Avenue West  
Seattle, WA 98119  
X: (206) 283-5044**TRANSMITTAL**

DATE: 6/7/95  
TO: Arnold Thompson  
COMPANY: Air Air Corp PROJECT ID: \_\_\_\_\_  
FAX #: 382-4309 PHONE #: \_\_\_\_\_  
FROM: \_\_\_\_\_

We are sending you: ☐ Attached ☐ Under separate cover via \_\_\_\_\_

(Including cover sheet)	Description
3	

These are transmitted as indicated:

☐ For your use ☐ For review and comment ☐ For your signature and return  
☐ As requested ☐ As noted ☐ Other \_\_\_\_\_

Remarks: \_\_\_\_\_

Original: Will Follow ☐ Will Not Follow ☐**IMPORTANT**

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FORMS/TRANSMIT

8/1/8/95